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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,311	02/28/2002	Eiji Saruwatari	04329.2750	6835

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EXAMINER

MEEK, JACOB M

ART UNIT PAPER NUMBER

2637

DATE MAILED: 11/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/084,311	Applicant(s) SARUWATARI, EIJI	
	Examiner Jacob Meek	Art Unit 2637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1 - 20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 - 18 is/are allowed.
- 6) ☒ Claim(s) 19 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, see pages 16 - 18, filed 9/15/2005, with respect to claims 1 – 5, 9 - 13 have been fully considered and are persuasive. The rejection of claims 1 – 5, and 9 - 13 has been withdrawn.
2. Applicant's arguments with respect to claims 19 and 20 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown (US-6,480,315).

With regard to claim 19, Brown discloses a method of monitoring a received optical signal comprising: detecting amplitude of the signal (see figure 2, 38); detecting noise power contained in the signal (see figure 2, 40 and column 3, lines 51 – 58); and controlling a difference level to be proportional to noise power of the signal (see column 4, lines 33 – 38). Brown discloses use of detected amplitude for control of difference level (see column 4, lines 26 – 30 and lines 52 - 59). Brown is silent with respect to different threshold levels and inverse proportionality. It would have been obvious to one of ordinary skill in the art at the

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time of invention that calculation could be performed using an inverse proportionality of amplitude signal, and that threshold can be adjusted by adjustment of signal level.

With regard to claim 20, Brown discloses a method of monitoring a received optical signal comprising: controlling an amplitude of the signal to be constant (see figure 4, 42 and column 6, lines 19 - 26); detecting noise power contained in the signal (see figure 4, 36, 40 and column 3, lines 51 – 58); and controlling a difference level to be proportional to noise power of the signal (see column 4, lines 33 – 38). Brown discloses use of detected amplitude for control of difference level (see column 4, lines 26 – 30 and lines 52 - 59).

Brown is silent with respect to different threshold levels. It would have been obvious to one of ordinary skill in the art at the time of invention that threshold can be adjusted by adjustment of signal level.

#### ***Allowable Subject Matter***

4. Claims 1 – 18 are allowed.
5. The following is an examiner's statement of reasons for allowance: Applicant's combination of elements and functionality as recited in claims 1 – 18 do not appear to be anticipated or rendered obvious by prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Other Cited Prior Art***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Taga et al (US 2003/020805A1) discloses an adaptive threshold control with many aspects of applicant's claimed invention.

Gitlin (US-5,191,462) discloses an apparatus with aspects of applicant's claimed invention.

Kato et al (US-4,700,392) discloses an apparatus with noise power detection and threshold setting controls.

Nash (US-4,241,236) discloses an apparatus with noise power detection capabilities.


NPL references disclose need for adaptive threshold capability in optical receivers.


***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob Meek whose telephone number is (571)272-3013. The examiner can normally be reached on 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571)272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JMM  
11/21/05 

  
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weck